

#26/55
10/7/036

RECEIVED

OCT 03 2002

TECH CENTER 1600/2900



1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/513,888C

DATE: 09/23/2002

TIME: 11:03:16

Input Set : A:\SUBS1.TXT

Output Set: N:\CRF3\09232002\I513888C.raw

3 <110> APPLICANT: CROCE, Carlo M.
4 ISHII, Hideshi
6 <120> TITLE OF INVENTION: COMPOSITIONS, KITS, AND METHODS RELATING TO THE HUMAN
7 FEZ1 GENE, A NOVEL TUMOR SUPPRESSOR GENE
9 <130> FILE REFERENCE: 9855-30U1 (209855.0081)
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/513,888C
12 <141> CURRENT FILING DATE: 2000-02-25
14 <150> PRIOR APPLICATION NUMBER: US 60/121,537
15 <151> PRIOR FILING DATE: 1999-02-25
17 <160> NUMBER OF SEQ ID NOS: 70
19 <170> SOFTWARE: PatentIn Ver. 2.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 9048
23 <212> TYPE: DNA
24 <213> ORGANISM: Homo sapiens
26 <400> SEQUENCE: 1
27 gcctttccaa gaccctgccc ggccctgccc catcctcagc cccgagtcac catgggcagc 60
28 gtcagtagcc tcattctccg ccacagcttc cacagcaagc actgccgggc ttgcgagtac 120
29 aagctgcgca agtcctccca cctcaagaag ctcaaccggt attccgacgg gctgctgagg 180
30 tttggcttct cccaggactc cggtcacggc aagtccagct ccaaaatggg caagagcgaa 240
31 gacttcttct acatcaaggc cagccagaaa gcccggggct cccatcaccc agattacacg 300
32 gcaactgtcca gcggggattt agggggccag gctgggggtg actttgaccc gtccacaccc 360
33 cccaagctca tgcccttctc caatcagcta gaaatggtta gcgggggtcg ctggcaaggg 420
34 taagtgggtt ggaaacgcag gagaaagcaa aatgggggtg gagagcctgg gggttcaggg 480
35 ggagtgggtg cctgagcatt cagactcctc aaaaccagag cggcaggggt gccggcggaa 540
36 gcctgtggcc acaccgcaga gatcaaactt ttcacaaagg aattagagca tcgctcagtc 600
37 cccctgaagc agaagtcttg ggtcaggcca taagcaaaaga gcacagggga tatgtgagct 660
38 tttggagttc cactgaaatg tagctggatt gtcaacgtag gatccaggcg tttgccaagc 720
39 ctgcgggaagg agagggagcc ctgttctcat ctggaagcac agatgaagag gatgcaggcc 780
40 gggagttaac cgcttctctc cccgggagac tcgtgggggt ggggtgcggtc ttctcatttg 840
41 ctgccctggt gtgcattagc tccttgttca agctgcgcct gggggcatct ttgaatacag 900
42 gctggagttt tgtcatccat ttaccagaga ctagggcaaa ggaggcccag gcactgagaa 960
43 atccagccct cacaccagct caagccctcg tgcgtccac gagtggacac tgaaatcaat 1020
44 tttcctatct agtcctctgc cccttgcctt ggggaaatga atccccggct ttgatttact 1080
45 aggaaagagc ctcttatgtt tgcatagagc attcagcttt tcaaattaag gggcttgtaa 1140
46 actgtgaagc actctaccag ggaaaattac agttttaaaa aaggatcgtg atttgagtg 1200
47 agcctcccaa ccctgtaagg agggcaggtc cgtgtccttg ctccaggctt aatggaagag 1260
48 gcagtgaaca ggaagaaggg atggacctaa agagggacag caagctcggc cagcctgatg 1320
49 ccctaacttg cccacacag agacctagag caggagcctc aagatgggtt ttatcacctc 1380
50 gggagggtcg gggcaagctg gtggcagggt gctatttcat agaacaaagt gcccaagtcg 1440
51 ccattagggt ttttccctcc taagagagat gacattcagc tgcttcaaag caacaggcaa 1500
52 ggtctgctga gacaattgac caagaggggt gctgcgtgcg ctccagagag ccagactggc 1560
53 tcaaggtcgg cacgcgtgcc tggggaggga ggggtgcaatg cgcgcgcagg ggaggcatga 1620

ENTERED

RAW SEQUENCE LISTING

DATE: 09/23/2002

PATENT APPLICATION: US/09/513,888C

TIME: 11:03:16

Input Set : A:\SUBS1.TXT

Output Set: N:\CRF3\09232002\I513888C.raw

```

54 gtcaccgcgg tcccttttcc ctacagggtc ccgagaaggg tgcagtggag cccacagcct 1680
55 tcaagcctgt gctgccacgg tcaggagcca tccctgcactc ctccccggag agtgccagcc 1740
56 accagctgca ccccgccctt ccagacaagc ccaaggagca ggagctgaag cctggcctgt 1800
57 gctctggggc gctgtcagac tccggccgga actccatgtc cagcctgccc acacacagca 1860
58 ccagcagcag ctaccagctg gacccgctgg tcacaccctg gggacccaca agccgttttg 1920
59 ggggctccgc ccacaacatc acccagggca tgcctctcca ggacagcaac atgatgagcc 1980
60 tgaaggctct gtcctttctc gacggaggta gcaagctggg ccactcgaac aaggcagaca 2040
61 agggcccttc gtgtgtccgc tcccccatct ccacggacga gtgcagcatc caggagctgg 2100
62 aacagaagct gttggagagg gagggcgccc tccagaagct gcagcgagc tttgaggaga 2160
63 aggagcttgc ctccagcctg gcctacgagg agcgcccgcg gcgtgcagg gacgagctgg 2220
64 agggcccgga gcccaaaggc ggcaacaagc tcaagcaggc ctgcgagaag agccagcgcg 2280
65 cgcagcaggt cctgcacctg caggtactgc agcttcagca ggagaagcgg cagctccggc 2340
66 aggagctcga gacccatcag aaggagcagg acctgctgga gaccaagctc aggtcctacg 2400
67 agagggagaa gaccagcttc gggcccgcg tggaggagac ccagtgggag gtgaggccac 2460
68 acagggctca tgggtttggg tggtcagcgg ttggcgcca gtacccccct ctcttcttgg 2520
69 tgctggccaa tagcgtgcaa acacagaccg cgcaggcaag cggggctaag gtgctggctt 2580
70 tatcacccaa agaaggggct ccctgcaaac catgttgggg gatcgactta catctgagct 2640
71 tccctctgtc cccaccatca ccctcatggc tccatgattt cagtttccca agtgagccat 2700
72 taaatcatga agccggaagc cagatgacca aggccagcc aggtgtggg ctgacctccc 2760
73 ttccatcagc tcccaggagg ctcaagaaga gaacaagccg tgcctgagtt caggcggggc 2820
74 caggggcca agagagcaca gaatgcattt gttgctttgg agggaggagc tgcacctact 2880
75 agtaagagg accctatttg tggcagggtt cagtgtatga agtggccact ccttgtgaa 2940
76 gtgtaagtgg aacttctatt tgggtgagct agatggaaac ctaggagagg aagtaaagag 3000
77 tccccactc acacacttac acactcacac acactcactc acccggtcac acgtggaaat 3060
78 gaggcacttg tacctgaccg tgctggagaa ccccataacc tctgcatcta ttagtgggaa 3120
79 agcagctttt ctacaccagg tgggtgtctg gatgactcat ggagttcaag cccatcgttg 3180
80 aggtctttta catgctcgca cccagcttgg tctgtccacg tgcctgcctc acccccagtt 3240
81 cagagtccaa atctcagctt acacgcaaac ccctggctat gtgcaagtca acaaccagtg 3300
82 gtttaacttg cccactgctg gcagctgtat cccccctatt taacaccaat ggtattgggt 3360
83 ttggtgtcag cctgattttc gtcacgatg tttatgcca catcctctga cctcaccct 3420
84 gcatgcaccc agccctctc tctcctgtct actggagtaa agactacctc acaaattcac 3480
85 tgctgtaccc agtgactagt atcatgctgg cttggatgca gagcccaatc cacatctgtc 3540
86 aaacgaggaa tcattttctt ctctcttgc tcttctttct ctatttccca cccctatccc 3600
87 ccatcaaaat ttggccaaga gcaatgatga aaaccgaagc cacaggtagt acccatgtgt 3660
88 ctctggatct tggccatctg gggctcatgg agaccaaggc cagtctggct gaatcttaag 3720
89 agtgaatgaa gtccagagca tgtggctcta cagaatggat tcttggaaat agcctggaag 3780
90 ccaccttcac atttcctttc acagtagaaa ttcccccttg ccctcagtga aacactgcac 3840
91 agtctggag aaaatccgac cctacccagg atgcgtgctt gggaccaaga atttcattcc 3900
92 aaggccaacc ctgtattcat gccacgaagg gagtgcacac gtcattggct aggcattggc 3960
93 ctggctttga acctcagctt gaccacttat gatccagggt attgtaaata cattagccat 4020
94 ggtggcaatg gggatatagt attaaactgt tgggatcaaa tctctactct tatactttat 4080
95 attttatata tatatatata taatatatat atatattagc cctcaggctg gtcacttcac 4140
96 cagctgtttg ctatcataac ctctctgtgc ctacagttca ttgatgtaa ttgaggacta 4200
97 ctaatagtag ctacttcac ggggttgaag gaatagatga gcaaagtat ggcttggcac 4260
98 ttaataacac taaaaattat tagtgaaagt atgtttataa taatatactt ctgtgtggct 4320
99 aggcgtggtg gctcacgctt gcaatcccag cactttggga ggcagaggca ggcagagcac 4380
100 ttgaggtcag gaattcgaga tcagcctggc caacatgagg aaaccccgtc tctactaaaa 4440
101 atacaaaaat cagccaggca tgggtggcagg tgtctgtaat cccagctact tgggaggctg 4500
102 aggcaggaga atcagagggg aggcggagggt tgcagtgagc caagatcacg ccactacacc 4560

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/513,888C

DATE: 09/23/2002

TIME: 11:03:16

Input Set : A:\SUBS1.TXT

Output Set: N:\CRF3\09232002\I513888C.raw

```

103 ccagcctagg tgacaaagcg agactttctca aatattaaca ataataatat actatgtgtc 4620
104 attatacatg atgattatta ttttatcatt ttactatata gcctagctcg ataacctggg 4680
105 araaagggtca cagcaatgtt cagcttactt tcagattgga caaaggctgg aatgcctaac 4740
106 accggggccac cgcacccgga gtggcttggg tatttttaggc agctgagctg tcacttccct 4800
107 gggtaaggac actcacctct tggcactctg tctccacccc accctcggca ggtgtgccag 4860
108 aagtcaggcg agatctccct cctgaagcag cagctgaagg agtcccagac ggaggtgaac 4920
109 gccaaggcta gcgagatcct ggggtctcaag gcacagctga aggacacgcg gggcaagctg 4980
110 gagggcctgg agctgaggac ccaggacctg gagggcgccc tgcgcaccaa gggcctggag 5040
111 ctggagggtct gtgagaatga gctgcagcgc aagaagaacg aggcggagct gctgcgggag 5100
112 aagggtgaacc tgctggagca ggagctgcag gagctgcggg cccaggccgc cctggccccg 5160
113 gacatggggc cgcaccctt ccccgaggac gtccctgccc tgcagcggga gctggagcgg 5220
114 ctgcggggcg agctgcggga ggagcggcaa ggccatgacc agatgtcctc gggcttccag 5280
115 catgagcggc tcgtgtggaa ggaggagaag gagaagggtg ttcagtacca gaaacagctg 5340
116 cagcagagct acgtggccat gtaccagcgg aaccagcgcc tggagaaggc cctgcagcag 5400
117 ctggcacgtg gggacagcgc cggggagccc ttggagggtg acctggaagg ggctgacatc 5460
118 ccctacgagg acatcatagc cactgagatc tgaggggctg cctgggaagg cgagtctggg 5520
119 gacctggcac tgggaggcag ggctctcccg tgcaccccc ctgctcagca attcagaccc 5580
120 ctctgagaga cgccactccc tgggacacag acccaggacc cccgagggga gggcaggatg 5640
121 gcctttcctt ccctctctga tgtcccagtg ctaccagcc ctgcagccca ccagacgtca 5700
122 ggccctgact cctctggctt tcccaggaga tgggtccagg ggtctgtctg ctttggttaa 5760
123 gggctcccta aactttggcc tttgttcgaa atagatatcc tctccccctc ctccaggga 5820
124 ggtggccaca gcaagaacag cggctccctt ccgcttctca tcccaacctc tttttcctcc 5880
125 tggacacatt ggaatgcctt ggaaatagaa agaagccata tatgaccaga agccttggaa 5940
126 ccagcccat cagaacctga gctattttcc tctggccgca gaggtgtagg ggtggaatga 6000
127 gccgcgggga agctggcttt gaaacctcag ggctgtccca gccccggcaa gccacaggaa 6060
128 ggaggggaga gacaggcagc ccagcagtggt ggagaccctg ccacagccag aggagggcag 6120
129 agggagaatc caagggttga gagccagtggt cgggtgatgg ccagcccctg gggcccagcc 6180
130 cctgtttact ggttcttgca aatgggagct gagcagcctc tggacagcca gtgacctttg 6240
131 acctcggtga ccactcttct ttaagccata gacctgagg cctgggctg ggtgctggga 6300
132 agggagggtt gaaaccaccg tgaaccagag ggtgtggctt tccagkacc ctccaggagc 6360
133 ctccccatct gtccagctgg ggccagaggc tgggagtcct tacctgcttc acgttggccg 6420
134 gcggctactc tggaatgttt ttccctcccc agaatacagc ttttgcttga tccagaagag 6480
135 cccatatcac taagatggca tataatgtgat ctgggcattt tctcctctg cctacagcca 6540
136 ggttttagcgg caaacctttc ccccttagca ccttcagggc tgagttctgg gtttctagag 6600
137 gtcaggacgg ctctcagag cgccagggaag ccagagcccc aagcaggacg aaaaagaggc 6660
138 atacacacag cagtgtgaat agcctggcca ccagccatcc tccctccacc tcaagacccc 6720
139 catttgtccs agactaaagg atccagagag cagctccctt tctcaggagc ttgggcagtg 6780
140 cccaggggag tccagggttt ctctgcagat gtgcggagcg ggaggcgggtg gtagagagag 6840
141 ataaaagggtg gagtttctct gttgtttggt tcagggattt tatttttaat tttatgagac 6900
142 agggctcttg cctgtccccc aggttgaggt gcagtgcat gatcatagct cactgcagcc 6960
143 tcatactctt gggctcaagc aatcctcctt cctcagcctt ccaactagct gggactacag 7020
144 gtgcgcgcca ccgtgcctgg ctaacttttc atttttttg tagggacggg gtctcgtttt 7080
145 gttgccaaag cttgctcaa acttgtggcc tcaagcaatc cacctgcctt ggcctcccaa 7140
146 agtgcgtgaga ttgcagatgt gagccaccgt gcctggccag atttttcttt tattctctt 7200
147 tctttttctt ttttgccttc ttgtcttttc agaagcaagc cagacctagc aggtgttcc 7260
148 atgttctatt tttgactgta gccacagctg ctgttctcag gacagcatcc cttcccacat 7320
149 gcctgcgcct gctgcctgct gagatgagga ggggagcgtc tgggaacttg cgagtccaag 7380
150 gccagtcccc atttctgcct cgtcaccgc tggcccttag agaccccgag gtaggggtg 7440
151 ggagatgctt ctctccttgc cccccgcct catgggtcct agcccttccc tgagtgcggg 7500

```

RAW SEQUENCE LISTING

DATE: 09/23/2002

PATENT APPLICATION: US/09/513,888C

TIME: 11:03:16

Input Set : A:\SUBS1.TXT

Output Set: N:\CRF3\09232002\I513888C.raw

```

152 ctgaggccag agtcaccttt tctgtggctg gctctacctt cctgtccctg aggttaaacg 7560
153 gtgcccattcc tgccatcctc aaacgacaga ggagcttttc tggaatttca aaccattgct 7620
154 cttagtccca agctaggctt aaacctggaa tctacaagcc aaaagtccct ccctgcctga 7680
155 gggcagtacc ctccattggg cacagtccag acccaagtca aagatgcccc attccttgcg 7740
156 cctcagccct cagttccttc atttccacca ggccgtgcct tgtttgagtt ttctctccca 7800
157 gtgagactgc cccacggaga cagaggaaag ggctggctcc cctcccccag gctggagacc 7860
158 ccccccaact ccaggaaaga gcagtcagag tccagtgtc tcctccagac gttgcctgag 7920
159 aagaagtggc tgccacaccc aggggaaggc cctgaggcgg aggctgtgct ccgccatggt 7980
160 gtcccggtac cttccataca cagaggagtg cagccttctc catatctcca tggccctgtc 8040
161 ccaggccggc ccagatgtgt cccccccagg ccttgtccta cgtccaaggt ggcagatgtc 8100
162 ttccctgggc tgccaccagc ccccgcccca gagtggccca ccgtggcact agaatgcaag 8160
163 tatcctgcga ccttgcaacc tcaccttctt gtgggtgttc ttctctgcc tgtccaaaag 8220
164 cgccctcact attcttgac catgccagat tctgcctctc tggaaagagg ctctggacag 8280
165 cagaagcctc caagcacaga gcctggcccc agggcccaga cagggtgggc ttctgcccct 8340
166 tccctctggg cagcctgct ggccgaccca ctgacctact cggatggacc aacctgctct 8400
167 gtccccaag gacgcctgca ggagagagca gcaactccgc tcacctcacc aaggatcgga 8460
168 ctctgcccct ggacctggga acgactggac tgtcacgggg ttccctccta gctctcccag 8520
169 tgaactcctg ccaggcacac acagccccta tagcaactgag ctacatggg actgggatat 8580
170 gggggcatct cttcccaga gaggactca gtgagcctcc tgtgcctggc ccagctctgg 8640
171 gccatctctt aggtgagaca gttgcccga actaagccag gcctggctgg aggagcagca 8700
172 gcttggggag agggatttcc ctgcagacct caagccatca tgcggtgggt gctgccatga 8760
173 cagaggctgc acccctgggc cagcggggct gctcaccac ctcttgtagc aggtggcctt 8820
174 tgtgctgcgc ctgcaggcag agctggagcc ccagcagag gcaggctggg acggaccagc 8880
175 atctggaaga tgtacatagt tatttttctc tttgtgggtt cttgtttggt ttggtttgct 8940
176 tttgacagct tcattttatt ttgacgtca ctttttgcc atgtaaacta tttgtggcaa 9000
177 ttttatgttt ttatttatga ataaagaatg ccatttctca cgccctct 9048
180 <210> SEQ ID NO: 2
181 <211> LENGTH: 5492
182 <212> TYPE: DNA
183 <213> ORGANISM: Homo sapiens
185 <400> SEQUENCE: 2
186 tgagggtttt gctatgacct cagtcccctc acggagccac gactgcccct tgctgccaca 60
187 gcctttccaa gacctgccc ggccctgccc catcctcagc cccgagtcac catgggcagc 120
188 gtcagtagcc tcactctcgg ccacagcttc cacagcaagc actgcccggc ttgcgagtag 180
189 aagctgcgca agtcctccca cctcaagaag ctcaaccggt attccgacgg gctgctgagg 240
190 tttggcttct cccaggactc cggtcacggc aagtccagct ccaaaatggg caagagcgaa 300
191 gacttcttct acatcaaggt cagccagaaa gcccggggct cccatcacc agattacacg 360
192 gcaactgtca ggggggattt agggggccag gctgggggtg actttgacct gtccacaccc 420
193 cccaagctca tgcccttctc caatcagcta gaaatgggct ccgagaaggg tgcagtgagg 480
194 cccacagcct tcaagcctgt gctgccaagg tcaggagcca tctgcactc ctccccggag 540
195 agtgccagcc accagctgca ccccgcccct ccagacaagc ccaaggagca ggagctgaag 600
196 cctggcctgt gctctggggc gctgtcagac tccggccgga actccatgtc cagcctgccc 660
197 acacacagca ccagcagcag ctaccagctg gacccgctgg tcacacccgt gggacccaca 720
198 agccgttttg ggggctccgc ccacaacatc acccagggca tcgtcctcca ggacagcaac 780
199 atgatgagcc tgaaggctct gtcccttctc gacggaggta gcaagctggg ccactcgaac 840
200 aaggcagaca agggccctc gtgtgtccgc tccccatct ccacggacga gtgcagcatc 900
201 caggagctgg agcagaagct gttggagagg gagggcggcc tccagaagct gcagcgcagc 960
202 tttgaggaga aggagcttgc ctccagcctg gcctacgagg agcggccgcg gcgctgcagg 1020
203 gacgagctgg agggcccgga gcccaaaggc ggcaacaagc tcaagcaggc ctgcagaaag 1080

```

RAW SEQUENCE LISTING

DATE: 09/23/2002

PATENT APPLICATION: US/09/513,888C

TIME: 11:03:16

Input Set : A:\SUBS1.TXT

Output Set: N:\CRF3\09232002\I513888C.raw

```

204 agccagcgcg cgcagcaggt cctgcacctg caggtaactgc agcttcagca ggagaagcgg 1140
205 cagctccggc aggagctcga gagcctcatg aaggagcagg acctgctgga gaccaagctc 1200
206 aggtcctacg agagggagaa gaccagcttc ggccccgcgc tggaggagac ccagtgggag 1260
207 gtgtgccaga agtcaggcga gatctccctc ctgaagcagc agctgaagga gtcccagacg 1320
208 gaggtgaacg ccaaggctag cgagatcctg ggtctcaagg cacagctgaa ggacacgcgg 1380
209 ggcaagctgg agggcctgga gctgaggacc caggacctgg agggcgccct gcgcaccaag 1440
210 ggcttgagc tggaggtctg tgagaatgag ctgcagcgca agaagaacga ggcggagctg 1500
211 ctgcgggaga aggtgaacct gctggagcag gagctgcagg agctgcgggc ccaggccggc 1560
212 ctggcccgcg acatgggggc gccacacctc ccgaggacg tccctgccct gcagcgggag 1620
213 ctggagcggc tgcggggcga gctgcgggag gagcggcaag gccatgacca gatgtcctcg 1680
214 ggcttccagc atgagcggct cgtgtggaag gaggagaagg agaaggtgat tcagtaccag 1740
215 aaacagctgc agcagagcta cgtggccatg taccagcgga accagcgctt ggagaaggcc 1800
216 ctgcagcagc tggcacgtgg ggacacgcgc ggggagccct tggagggtga cctggaaggg 1860
217 gctgacatcc cctacgagga catcatagcc actgagatct gaggggctgc ctgggaaggc 1920
218 gagtctgggg acctggcact gggaggcagg gctctccctg gcaccccccc tgctcagcaa 1980
219 ttcagacccc tctgagagac gccactccct gggacacaga ccaggacccc ccgaggggag 2040
220 ggcaggatgg cctttccttc cctctctgat gtcccagtcg tcaccagccc tgcagcccac 2100
221 cagacgtcag gccctgactc ctctggcttt ccaggagat gggtcagggg gtctgtctgc 2160
222 tttggttaag ggctccctaa actttggcct ttgttcgaaa tagatatcct cccccctcc 2220
223 tccagggaag gtggccacag caagaacagc ggctccctc cgcttctcat cccaacctct 2280
224 ttttctcctt ggacacattg gaatgccttg gaaatagaaa gaagccatat atgaccagaa 2340
225 gccttggaac cagccccatc agaacctgag ctattttcct ctggccgcag aggtgtaggg 2400
226 gtggaatgag ccgcggggaa gctggctttg aaacctcagg gctgtcccag ccccggaag 2460
227 ccacaggaag gaggggagag acaggcagcc cagcagtggt gagacctgc cacagccaga 2520
228 ggagggcaga gggagaatcc aagggttgag agccagtggt ggggtgatggc cagcccctgg 2580
229 ggcccagccc ctgtttactg gttcttgcaa atgggagctg agcagcctct ggacagccag 2640
230 tgacctttga cctcgggtgac cactcttctt taagccatag accctgaggc cctgggctgg 2700
231 gtgctgggaa gggagggttg aaaccaccgt gaaccagagg gtgtggcttt ccaggcacc 2760
232 tcagggagcc tccccatctg tccagctggg gccagaggct gggagtccct acctgcttca 2820
233 cgttgccggc cggtactctt ggaatgtttt tccctcccca gaatcaagct tttgcttgat 2880
234 ccagaagagc ccatactact aagatggcat atatgtgatc tgggcatttt cctcctctgc 2940
235 ctacagccag gtttagcggc aaacctttcc ccttagcac cttcagggtc gagttctggg 3000
236 tttctagagg tcaggacggc tctcagagc gccaggaagc cagagcccca agcaggacga 3060
237 aaaagaggca tacacacagc agtgtgaata gcctggccac cagccatcct cctccacct 3120
238 caagaccccc atttgtccca gactaaagga tccagagagc agctcccttt ctcaggagct 3180
239 tgggcagtcg cccaggggagt ccagggtttc tctgcagatg tgcggagcgg gaggcgggtg 3240
240 tagagagaga taaaagggtg agtttctctg ttgtttggtt cagggatttt atttttaatt 3300
241 ttatgagaca gggctcttgc ctgtccccc aagctggagt cagtggcatg atcatagctc 3360
242 actgcagcct catactcctg ggtcaagca atcctcctgc ctcagccttc caactagctg 3420
243 ggactacagg tgcgcgccac cgtgcctggc taacttttca tttttttgt agggacgggg 3480
244 tctcgttttg ttgcaaagc tggctcctaa cttgtggcct caagcaatcc acctgccttg 3540
245 gcctcccaaa gtgctgagat tgcagatgtg agccaccgtg cctggccaga tttttctttt 3600
246 attcttcttt tttttctttt tttgctttct tgtcttttca gaagcaagcc agacctagca 3660
247 ggctgttcca tgtctatttt ttgactgtag ccacagctgc tgttctcagg acagcatccc 3720
248 ttcccacatg cctgcgcctg ctgcctgctg agatgaggag gggagcgtct gggaacttgc 3780
249 gagtccaagg ccagtcccca tttctgcctc gctcaccgtt ggcccttaga gaccccgagg 3840
250 taggggtggg gagatgcttc tctccttgcc cccgcctc atgggtccta gcccttccct 3900
251 gagtgcgggc tgaggccaga gtcacctttt ctgtggctgg ctctaccttc ctgtccctga 3960
252 ggttaaacgg tgcccatcct gccatcctca aacgacagag gagcttttct ggaatttcaa 4020

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/513,888C

DATE: 09/23/2002
TIME: 11:03:17

Input Set : A:\SUBs1.TXT

Output Set: N:\CRF3\09232002\I513888C.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 1

VERIFICATION SUMMARY

DATE: 09/23/2002

PATENT APPLICATION: US/09/513,888C

TIME: 11:03:17

Input Set : A:\SUBs1.TXT

Output Set: N:\CRF3\09232002\I513888C.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number